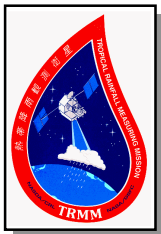


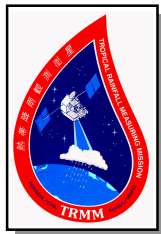
TRMM Monthly Status Briefing

February 2, 2000



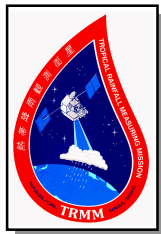
FOT Overview

- Operations Status - Engineering Staff
 - Flight Ops Summary - Lou Kurzmilller
 - Training & Certification Status - Ave Kludze
 - Thermal, Electrical, & Power - Ave Kludze
 - C&DH, RF, & ACS - Edwin Weidner
 - Deployables - Joe Kowalski
 - RCS - Andy Calloway
 - LIS - Andy Calloway
 - VIRS - Ave Kludze
 - TMI & PR - Joe Kowalski
 - CERES - Edwin Weidner
 - Ground System - Edwin Weidner
 - Upcoming Events - Andy Calloway



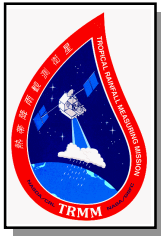
Flight Operations Summary

- Supported 556 SN events in January
 - 1 Yaw Maneuver & 6 Delta-V Maneuvers
- 8 Event Rpts, 6 Generic Late Acqs & no Anomaly Rpts generated
 - ER #146, 147, & 148 - PTP h/w failure & misconfiguration with some data loss sustained
 - ER #149 - H/W failure on admin PC
 - ER #150 - 3 SN Late Acqs (TDRS view times shifted)
 - ER #151 - FEP-1 crash
 - ER #152 - Neg Acq after Delta-V #155; No data loss
 - ER #153 - 2 SN events rescheduled per NCC Scheduling request



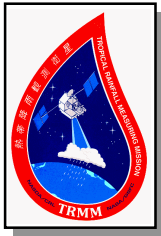
Flight Operations Summary

- Significant Milestones
 - New CERES load-shed scenario installed
 - Launch TSMs zeroed out
 - PSIB Patch test review completed
- Staffing
 - Personnel matters remain stable
 - Attempting to acquire two additional console analysts
 - Mgr's office to be relocated due to renovation



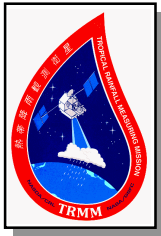
Training

- All four new hires are expected to complete Console Certification requirements next week
 - Skills Catalog sign-offs almost complete
- Command Controller Certification
 - First new hire has completed all requirements for certification
 - The other 3 are expected to complete requirements next week



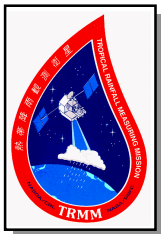
Thermal Subsystem

- Thermal subsystem is nominal
- Thermal data for January has been provided to Code 540 for analysis



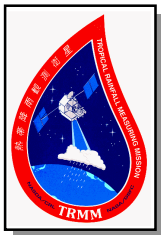
Electrical Subsystem

- Electrical subsystem is nominal



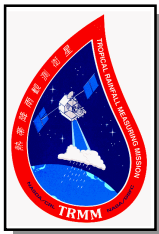
Power Subsystem

- Open Issues
 - FSW patch to PSIB timer routines (CCR #050 - AR #73)
 - » MOC to STTF tested
 - » Scheduled for mid February
 - PSIB Reset Count Increments Incorrectly (CCR #060)
 - » Determine if a solution exists for problem
 - Bug in PSIB S3R2FTF/WS3R2FTF Conversion Tool (CCR #061)
 - » Patch the tool code to correct problem
 - PSIB Battery 2 Voltage Differential Telemetry Bug (CCR #062)
 - » Patch the code to correct problem
- Open Anomalies
 - #73 PSIB A Orbit Status Timer Unchanged
 - » Will be closed with the patch uplink



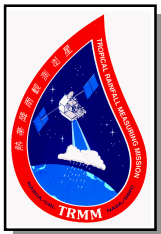
C&DH Subsystem

- UTCF was adjusted on 00-006, 017, and 027
 - Current UTCF value is 31535996.851025 sec
- Flywheels on 00-006, 013, 019, 023, and 030
- New load-shed scenario implemented on 00-020 (CCR #045)
 - Modified RTS #2, 3, and 15
 - New RTS #14 and 34
- New TSM system table #21
 - CERES current monitors #35 and 36 (CCR #045)
 - Zero the launch monitors #44 - 63 (CCR #039)



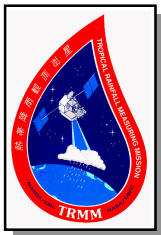
C&DH Subsystem

- Open Issues
 - Writing to EEPROM (CCR #034)
 - » New TSM table
 - » New load-shed scenario
 - Noop of unwanted RTSs (CCR #057)
 - DS filter table to record all ACE data (CCR #048)
 - No-clock software patch developed, although no indication of anomaly on FS B (CCR #047)
 - » Is FS A a failover option???



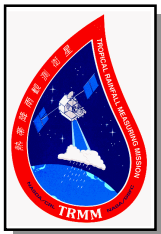
RF Subsystem

- Generic Late Acquisitions on 00-003, 010, 017, 022, 023, and 026
- Open Issues
 - Offsetting the transponder frequencies



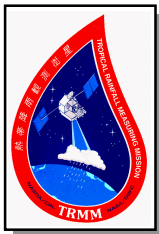
ACS Subsystem

- Writing to EEPROM
 - Solar Array jitter patch (AR #74)
 - » Awaiting final simulation results (Deep Space Cal and non-nominal Yaws)
 - » ACS AETD to review all data
 - Correction for Magnetic Field Epoch (CCR #005)
 - » Awaiting ACS analysis
 - TDRS EPVs limits update (AR #60 - CCR #035)
- Yaw updates
- ESA Fogging
 - Currently steady



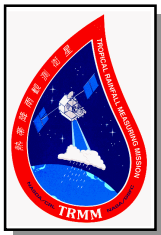
ACS Subsystem

- Possibility of pitching S/C to warm PR in Safehold or Sun Acq
 - Pitch versus thermistor locations analysis
- ACS Flight Software bug (CCR #053)
- Correction of RTS #2 (CCR #058)



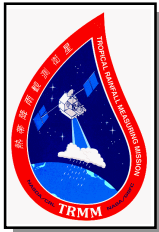
Deployables Subsystem

- -Y solar array drive temperature
 - Currently solar array drive continues to operate nominally with no signs of slippage
- Open Issues
 - Deployables AETD looking into the possibility of checking the glitch buffer by loading software stops that will enable the solar arrays to track past 90°
 - » Risk Analysis to be conducted first



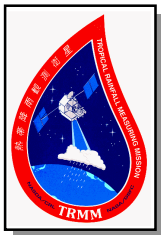
RCS Subsystem

- RCS performed nominally through Delta-V maneuvers #152 - #157
- Current maneuver frequency average is every four days
- Fuel remaining is 635.5 kg (71.4% of total), with sufficient Nitrogen pressurant to last into 2002 based on latest predictions
- Average fuel usage per maneuver remains between 1.4 kg and 1.7 kg



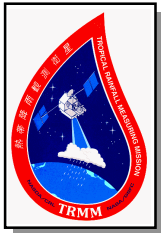
LIS Instrument

- Routine MSFC real-time command request performed on 00-018
- Open Issues
 - LIS Automatic Heater Controller remains disabled
 - Awaiting MSFC report on the LIS Automatic Heater Controller Anomaly (AR #78)



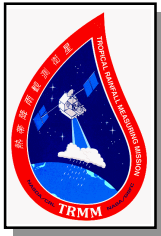
VIRS Instrument

- VIRS is nominal
- 2 Solar Calibrations were performed this month
- At the PI's request, the Blackbody Temperature is being maintained between 9°C and 16°C by manually turning the heater ON and OFF
 - This might change in October 2000 when a new software release is implemented



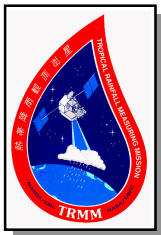
TMI Instrument

- No concerns or open issues



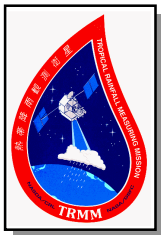
PR Instrument

- 3 External Calibrations done in month of January
- Open Issues
 - Frequency agreement expiration
 - Opening of PR survival heater relays
 - » Will initiate talks with NASDA via USA TIL
 - Dr. Kummerow informed and will review



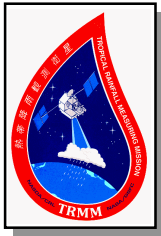
CERES Instrument

- Next turn on period will be determined by TERRA checkout
 - Possibly mid to end of February
 - Will most likely not power OFF again due to saturation of converter voltage reading
- Contingency load-shed plan put in place 00-020
 - CERES to be powered OFF only for low power; Safe mode otherwise
 - New current monitors



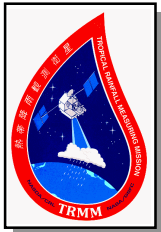
Ground System

- Mission Planning still being run from string 2
 - Awaiting failover and parallel operations testing on string 3
- PTP #1 replaced on 00-014
 - Now back to normal configuration
- New /TABLE conversion DR found
- Event Reports
 - #146, 147, & 148
 - » PTP h/w failure & misconfiguration with some data loss sustained
 - #149: H/W failure on admin PC
 - #150: Late Acquisitions on TDRS-171
 - » Shifted views due to extended Y2K burn
 - #151: FEP-1 crashed due to Q-channel Overflows (00-017)



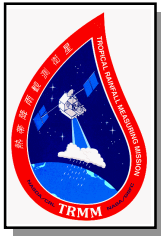
Ground System

- Event Reports (continued)
 - #152: Negative Acquisition (00-021)
 - » FDF software bug with TRMM post-DeltaV vector at WSC
 - #153: Two events rescheduled for Shuttle Test (00-026)



Upcoming Activities

- 0-1 Month
 - PSIB Patch Uplink
 - Replace Launch RTSs with Noop commands in RAM & EEPROM
 - SA Jitter Patch to EEPROM
 - Return CERES instrument to operational status
 - Dump ACS / SC Memory and update GRIs
 - Compile new ODB version 11.2
 - String 3 Returned as Primary MP String
 - February 29th (00-060) Software Contingency Review
 - Begin monthly DSN supports for contingency training
 - NCC Tour for the FOT



Upcoming Activities

- 2-3 Months
 - System Software Release 8.1 delivery
 - FOT/ACS/FDF large yaw update review meeting
 - 1st draft of TRMM Continuous Risk Management Plan (per ESMO format)
- Ongoing
 - Continue to Close Open CCRs, MOCRs, and Action Items